

School of Chemistry

Aims and Objectives: Session 2023-2024

Module CH1401: Introductory Inorganic and Physical Chemistry

Course Title: Chemical Kinetics

Duration: 4 hours

Lecturer: Dr D. G. Pinto

Aims: Introduce Chemical Kinetics as the Rate at which a thermodynamically favourable reaction can occur and equilibrium achieved.

Objectives:

1. Define units of rate and how rate can be measured.
2. To discuss the rate law as the dependence of rate upon reactant concentration.
3. Via the rate law, introduce the concepts of order of reaction.
4. To treat first order processes mathematically.
5. To analyse the temperature dependence of rate in terms of the Arrhenius equation, activation energy and pre-exponential factor.
6. To discuss briefly theories of rate processes.